

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
30 September 2004 (30.09.2004)

PCT

(10) International Publication Number  
WO 2004/082579 A2

(51) International Patent Classification<sup>7</sup>:

A61K

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:

PCT/EP2004/050246

(22) International Filing Date: 3 March 2004 (03.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
03075781.9 18 March 2003 (18.03.2003) EP

(71) Applicant (for all designated States except US): **Pharmacia Italia S.p.A.** [IT/IT]; Via Robert Koch 1.2, I-20152 Milan (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **GERONI, Maria, Cristina, Rosa** [IT/IT]; Via Correggio, 48, I-20149 Milan (IT). **PACCIARINI, Maria, Adele** [IT/IT]; Via Degli Imbriani, 39, I-20158 Milan (IT). **SUARATO, Antonino** [IT/IT]; Via Degli Imbriani, 39, I-MILAN 20158 (IT).

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2004/082579 A2

(54) Title: COMBINED THERAPY AGAINST TUMORS COMPRISING NEMORUBICIN WITH RADIATION THERAPY

(57) Abstract: The present invention relates to a morpholinyl anthracycline derivative for use as radiosensitizer, to be administered in combination with radiation therapy, so that a synergistic effect can be revealed.